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STANDARDIZATION OF MORBIDITY REPORTING AND DEVELOPMENT OF THE MORBIDITY REPORTING AREA¹

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The prompt, complete, and accurate reporting of the notifiable diseases is one of the fundamentals upon which public health work is based. Without the knowledge derived from such reporting, the health officer is not informed as to what problems he has to deal with or where such problems require concentrated effort. There can not be too frequent repetition of the importance of prompt and complete reporting of the notifiable diseases.

A comparison of the morbidity reports made to the Public Health Service over a series of years shows that progress is being made; but there is still much room for improvement. The Pennsylvania State Department of Health has recently made a study of case fatality rates in that State. The reports of cases were checked with the mortality registration cards and fatality rates were computed, using only those deaths which had been reported as cases. This eliminates the error due to the inclusion of many deaths for which there were no case reports.

There has been received from the State Department of Health of Pennsylvania by the Public Health Service a series of such computations which include estimated case fatality rates, to which some factor of correction has been applied, and which are designated "Probable Correct Ratios." These estimated probable correct ratios, together with the rates computed by the Public Health Service, are presented in the following table:

¹ Presented at the Thirtieth Annual Conference of State and Territorial Health Officers with the United States Public Health Service, Washington, D. C., June 6, 1932.

Number of cases for each death

	Probable correct ratios, estimated by Pennsylvania State Department of Health	Ratios computed by the Public Health Service
Diphtheria.....	15	11
Measles.....	400	106
Scarlet fever.....	100	78
Typhoid fever.....	12	5
Whooping cough.....	125	26

If these probable correct ratios can be accepted as the true ratios of cases to deaths, and if they are applicable to the United States as a whole, then the average number of cases for each death as reported to the Public Health Service by State health officers is too low for each of the diseases included in the table. A comparison of the ratios computed by the Public Health Service with those suggested by the State of Pennsylvania shows that the Public Health Service case fatality ratios are the following percentages of the ratios estimated as probably correct by the Pennsylvania State Department of Health:

Diphtheria.....	per cent.....	73.3
Measles.....	do.....	26.4
Scarlet fever.....	do.....	78.0
Typhoid fever.....	do.....	41.7
Whooping cough.....	do.....	20.8

The case fatality ratios of the Public Health Service are based on the averages of reports for all States in the registration area for deaths over a period of three years. The figures include many rural areas in which very little has been done to secure reports. A much better showing is made by many States and cities. In fact, as the ratios are based on averages, about one-half of the States make a better showing.

In June, 1917, the first regular weekly telegraphic reports of the prevalence of communicable diseases were received by the Public Health Service from State health officers. For several weeks these reports were received from only one State—California; but by December, 1917, telegraphic reports were published weekly from eight States. Two years later, in December, 1919, 26 States were making telegraphic reports. At the present time these reports are received from all of the States except Nevada, although two or three States are able to report for only a few diseases. However, improvement in this respect is being made. The State of Virginia is now making plans to secure weekly reports of several diseases which have heretofore been reported to the State health department monthly. This will add one more State to the number from which weekly telegraphic reports for nine diseases are being received by the United States Public Health Service.

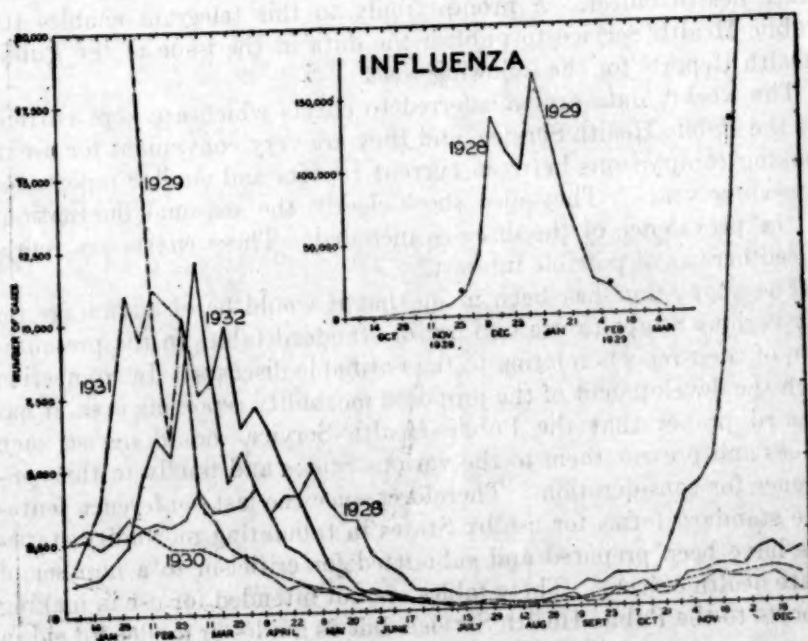
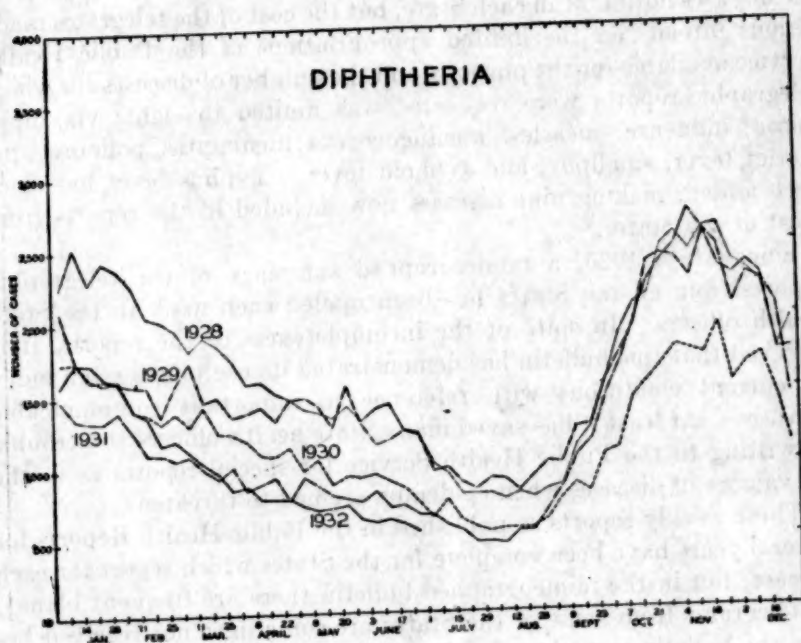
Before September, 1927, the telegraphic reports included most of the diseases notifiable in each State, but the cost of the telegrams made serious inroads on the limited appropriations of the Public Health Service available for the purpose, and the number of diseases for which telegraphic reports were requested was limited to eight; viz, diphtheria, influenza, measles, meningococcus meningitis, poliomyelitis, scarlet fever, smallpox, and typhoid fever. Typhus fever has since been added, making nine diseases now included in the reports from most of the States.

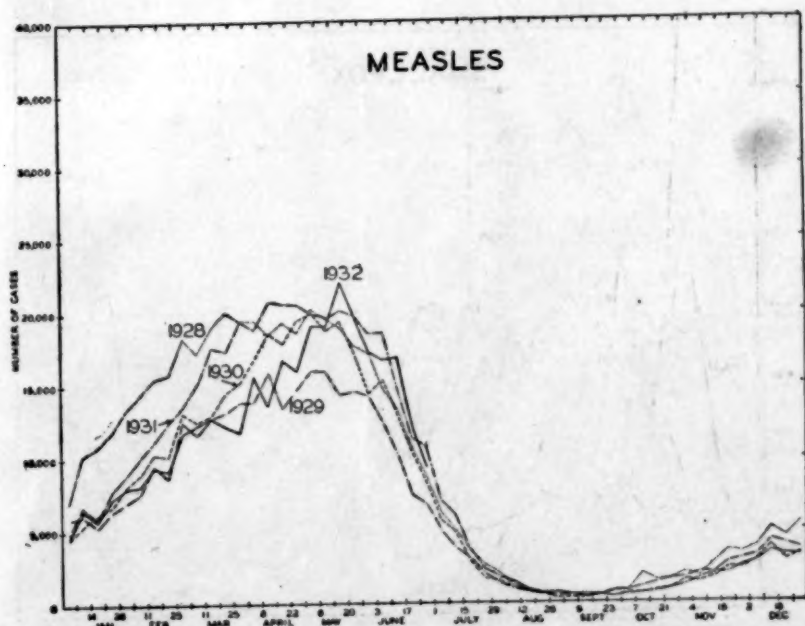
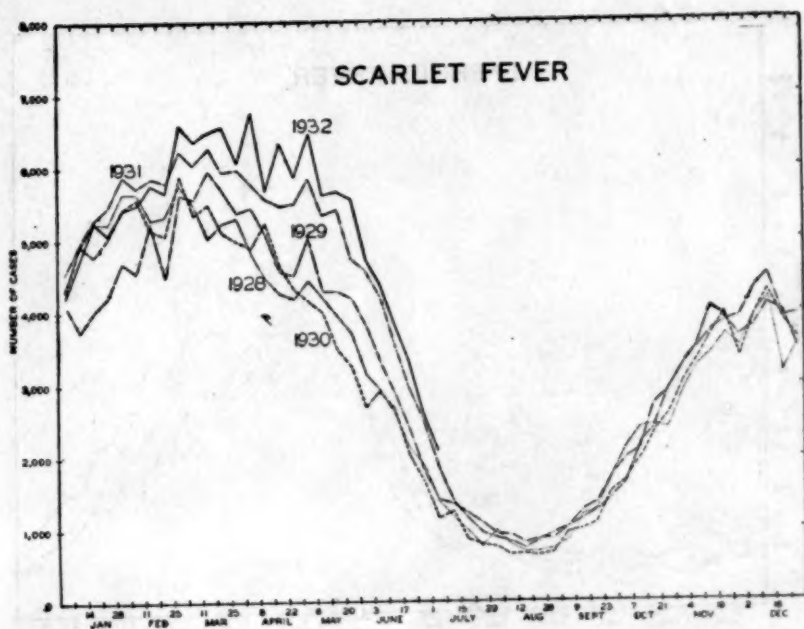
Since May, 1925, a mimeographed summary of the telegraphic reports from all the States has been mailed each week to the State health officers. In spite of the incompleteness of the reports, it is believed that this bulletin has demonstrated its usefulness as an index of current conditions with reference to important communicable diseases. At least it has saved many State health officers the trouble of writing to the Public Health Service for special reports as to the prevalence of diseases when epidemics seemed to threaten.

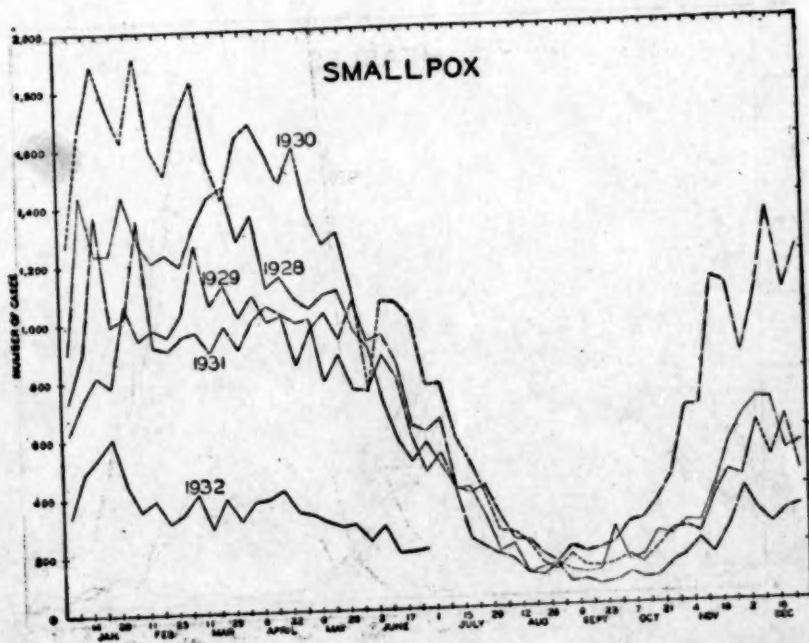
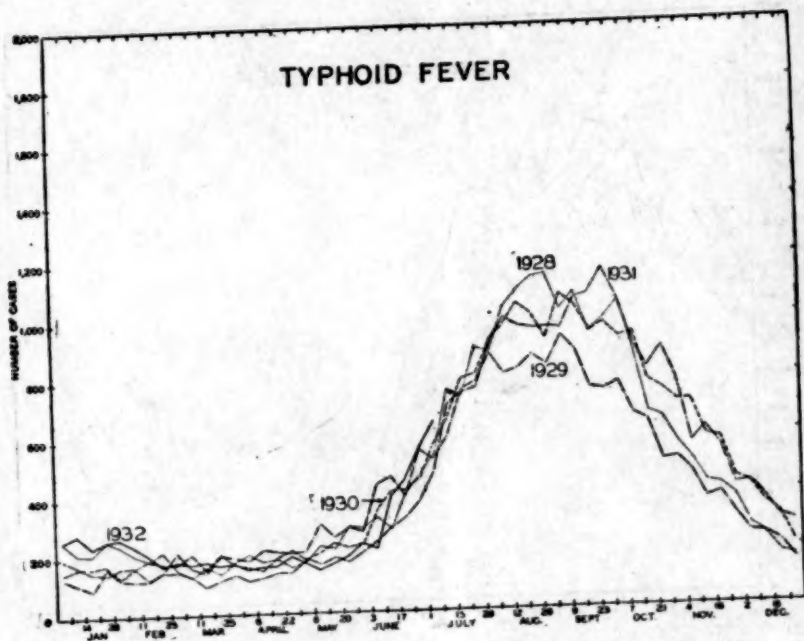
These weekly reports as published in the Public Health Reports for several years have been complete for the States which report for each disease; but in the mimeographed bulletin there are frequent blanks, as telegrams from some of the States are sometimes not received before the bulletin is made up. When the report from any State is not received by Thursday morning, a telegram requesting it is sent to the State health officer. A prompt reply to this telegram enables the Public Health Service to publish the data in the issue of the Public Health Reports for the following week.

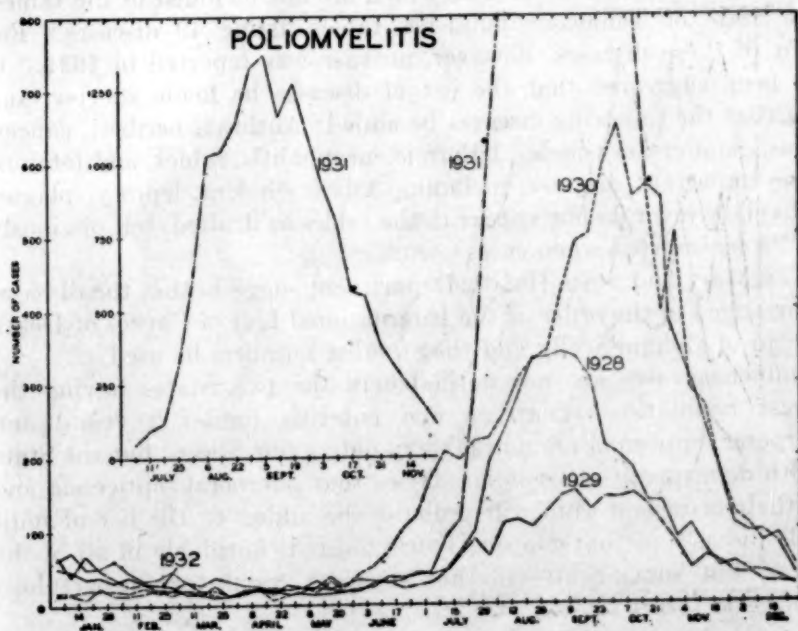
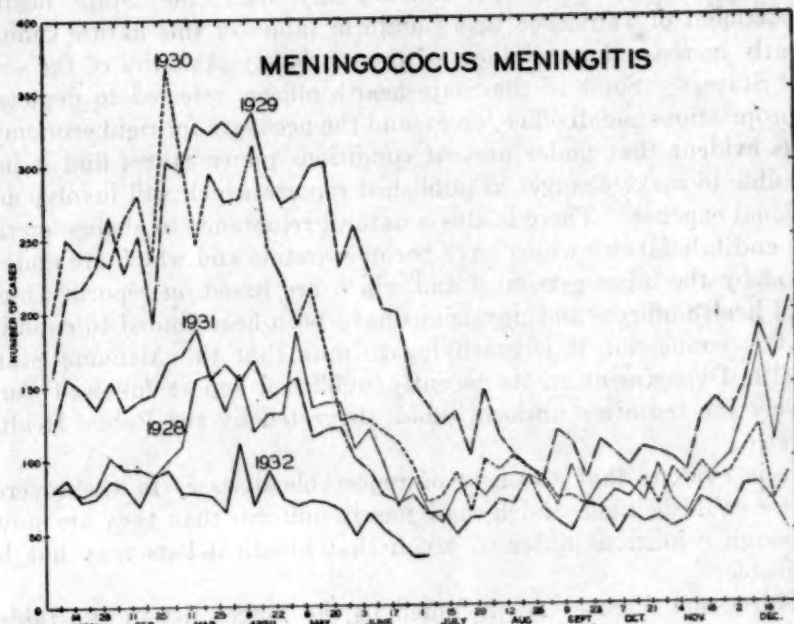
The weekly data are transferred to charts which are kept current by the Public Health Service, and they are very convenient for use in making comparisons between current reports and similar reports for preceding years. They also show clearly the seasonal fluctuations in the prevalence of the diseases included. These charts are reproduced here as of possible interest.

The suggestion has been made that it would be of advantage for the various States to use uniform or standard tables in the presentation of their reports relating to the notifiable diseases. In connection with the development of the proposed morbidity reporting area, it has seemed proper that the Public Health Service should devise such tables and present them to the various States and finally to this conference for consideration. Therefore, since the last conference tentative standard forms for use by States in tabulating morbidity statistics have been prepared and submitted for criticism to a number of State health officers. These tables are not intended for use in making reports to the Public Health Service, but as guides or models to aid in securing comparability in the published morbidity statistics of State health departments.









All of the State health officers who examined the tentative standard tables and replied agreed substantially with the State health department of Tennessee that "uniform tables of this nature should greatly increase the usefulness of the morbidity statistics of the several States." Some of the State health officers referred to depleted appropriations, small office forces, and the necessity for rigid economy. It is evident that under present conditions many States find it impossible to make changes in published reports which will involve additional expense. There is also a natural reluctance to change methods and tabulations which have become routine and which are understood by the office personnel and which are based on reports which local health officers and physicians have been accustomed to submit. In this connection it is gratifying to note that the Alabama State Health Department in its recently published report followed very closely the tentative uniform tables suggested by the Public Health Service.

It is evident that the lists of reportable diseases in the several States could be made much more nearly uniform than they are now, although conditions differ so much that identical lists may not be desirable.

Thirty-one diseases are included in the longer list in the tables as drafted by the Public Health Service. Some States do not receive detailed reports of a number of these diseases; other States receive reports of a number of diseases which are not included in the tables. The State of Tennessee publishes tables listing 49 diseases. For eight of these diseases, however, no case was reported in 1931. It has been suggested that the list of diseases be made shorter, and also that the following diseases be added: Anthrax, beriberi, cancer, favus, glanders, erysipelas, lethargic encephalitis, rabies, and tetanus. Some important diseases, including Asiatic cholera, leprosy, plague, and yellow fever do not appear in the tables as drafted, but obviously should be inserted when cases occur.

The Maryland State Health Department suggests that the diseases be arranged in the order of the International List of Causes of Death instead of alphabetically and that the list numbers be used.

Influenza cases are not notifiable in the two States having the largest population. Diarrhea and enteritis (under 2 years) and puerperal septicemia are notifiable in only a few States, but the State health department of Georgia advises that puerperal septicemia and ophthalmia neonatorum will probably be added to the list of notifiable diseases in that State. Tuberculosis is notifiable in all of the States, but some States do not separate respiratory tuberculosis from other forms.

Cases of notifiable diseases reported in the State of ----- during 1932, by ages

Disease	Total	Under 1 year	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 to 14 years	15 to 19 years	20 to 24 years	25 to 29 years	30 to 34 years	35 to 44 years	45 to 54 years	55 to 64 years	65 to 74 years	75 years and over	Age unknown
Chancroid																						
Chicken pox																						
Diarrhea and enteritis (under 2 years)																						
Diphtheria																						
Dysentery																						
Amelio																						
Bacillary																						
German measles																						
Gonorrhea																						
Hook worm disease																						
Influenza																						
Malaria																						
Measles																						
Meningococcus meningitis																						
Mumps																						
Ophthalmia neonatorum																						
Paratyphoid fever																						
Pellagra																						
Pneumonia (all forms)																						
Poliomyelitis																						
Puerperal septicemia																						
Rocky Mountain spotted fever (including eastern type)																						
Scarlet fever																						
Septic sore throat																						
Smallpox																						
Syphilis																						
Tuberculosis																						
Respiratory																						
Other forms																						
Tularemia																						
Typhoid fever																						
Typhus fever																						
Undulant fever																						
Whooping cough																						

(This table can be subdivided to show cases by color or race.)

Cases of notifiable diseases reported in the State of ----- during the year 193--, by months

[illegible]

Cases of notifiable diseases reported in the State of ----- during 193--, by color and sex, with case rates

[illegible]

Cases of notifiable diseases reported in the State of ----- during 1932, by counties and cities, with case rates

Counties and cities	Diphtheria		Influenza		Measles		Meningococcus meningitis		Paratyphoid fever		Polio-myelitis		Scarlet fever		Small-pox		Respiratory tuberculosis		Tuberculosis, other forms		Typhoid fever		Whooping cough	
	Number of cases	Cases per 100,000 population	Number of cases	Cases per 100,000 population	Number of cases	Cases per 100,000 population	Number of cases	Cases per 100,000 population	Number of cases	Cases per 100,000 population	Number of cases	Cases per 100,000 population	Number of cases	Cases per 100,000 population	Number of cases	Cases per 100,000 population	Number of cases	Cases per 100,000 population	Number of cases	Cases per 100,000 population	Number of cases	Cases per 100,000 population	Number of cases	Cases per 100,000 population
Aaron County	32	41	1,173	1,485	467	591	4	5	3	4	1	1	69	87	1	1	137	173	8	10	29	37	83	67
Bancroft County (exclusive of Bancroft City)	79	63	1,939	1,551	36	29	1	1	1	1	1	1	229	183	0	0	164	131	16	13	37	30	237	190
Bancroft City	547	68	6,687	831	145	18	19	2	23	3	9	1	1,532	190	0	0	1,275	158	175	22	77	9	3,558	442
Claremont County	97	147	1,037	1,571	45	68	5	8	1	2	7	11	342	518	6	9	1,119	180	8	12	39	59	93	141
Total for State	755	70	10,836	1,008	693	64	29	3	28	3	18	2	2,172	292	7	1	1,695	158	207	19	182	17	3,941	367

This table can be extended to include other diseases.

From the State Health Department of California comes the suggestion that if pneumonia is made reportable, it be divided and separate reports made for broncho-pneumonia, lobar pneumonia, and other forms. However, few, if any, States now collect the data in this form. All of the State health officers who submitted criticisms apparently agreed that a table showing the incidence of notifiable diseases by months is necessary.

Three of the tentative tables as prepared by the Public Health Service called for classifications by age and color. It has been suggested that these three tables be combined in one. The classification by color is deemed essential by health officers in States where a large part of the population is colored. Massachusetts, New York, and Michigan do not consider it necessary to classify by color. However, the colored population of Michigan increased 182 per cent between 1920 and 1930. Negroes now constitute more than 3 per cent of the total population of that State, and they may become numerous enough noticeably to influence case and death rates. California, it appears, is not prepared to give color or sex, but new cards will provide for classification by race to show the incidence of some diseases among Mexicans and Japanese. It is not necessary that all States classify by color and race, but health officers in States having a considerable number of inhabitants of a class which has higher morbidity rates than the average for certain diseases should bear in mind that if only the total figures are published these figures will usually be compared with figures for the white populations in States which classify by color or race.

Two of the tables call for case rates, one table with a classification by sex and the other by political subdivisions of the State. It is evident from the criticisms that the work of computing these rates is a serious problem in many State health departments. Some States compute rates for a few diseases only and some compute rates for the aggregate of rural and urban areas. A possible solution of this problem might be found by adding to the tables a line or a column giving the population data necessary for computing rates. This will enable anyone who has a computing machine, a slide rule, or a table of logarithms to secure easily any rate desired. The Tennessee State Health Department suggests that if rates are published for each county and city a footnote should be inserted cautioning against making comparisons on the basis of rates.

The Massachusetts State Health Department suggests adding to tables calling for classification by sex a heading "sex unknown."

Before requesting this conference to approve uniform or standard tables, it is desired to study further the problem and receive the comment of a number of other State health departments.

It will be recalled that last year this conference approved a suggested plan for the proposed morbidity reporting area. The requirements for admission to the morbidity reporting area were as follows:

(1) The State must be included in the registration area for births and deaths.

(2) There must be adequate legislation to enforce reporting.

(3) There must be machinery for securing reports and keeping records.

(4) There must be a clerical force to do the work required.

(5) There must be willingness to cooperate in efforts to secure more nearly accurate and complete reports of the notifiable diseases.

(6) The State must secure reports of at least as many cases per death as the average number reported by States in the registration area for deaths for the preceding three years for five diseases—diphtheria, measles, scarlet fever, typhoid fever, and whooping cough. The average number of cases per death which was used as the standard for comparison was computed on the aggregate numbers of cases and deaths reported by all States in the registration area for deaths and calculated separately for each disease for each year. At the conference last year 24 States were rated as standard, that is, above the average number of cases reported for each death, and 21 States were rated as below standard, that is, below the average number of cases reported for each death. For four States data were incomplete; therefore, they could not be rated. The ratings of the States last year as just mentioned were based upon the numbers of cases of the diseases reported for the years 1927, 1928, and 1929. This year similar computations made on the numbers of cases reported for 1928, 1929, and 1930 give the following results:

States rated standard

(Above the average number of cases reported for each death)

- | | | |
|--------------------------|---------------------|---------------------|
| 1. California. | 10. Minnesota. | 19. Rhode Island. |
| 2. Connecticut. | 11. Mississippi. | 20. South Carolina. |
| 3. District of Columbia. | 12. Montana. | 21. Utah. |
| 4. Illinois. | 13. New Jersey. | 22. Vermont. |
| 5. Kansas. | 14. New York. | 23. Virginia. |
| 6. Maine. | 15. North Carolina. | 24. Washington. |
| 7. Maryland. | 16. Ohio. | 25. Wisconsin. |
| 8. Massachusetts. | 17. Oregon. | 26. Wyoming. |
| 9. Michigan. | 18. Pennsylvania. | |

States rated below standard

(Below the average number of cases reported for each death)

- | | | |
|--------------|----------------|--------------------|
| 1. Alabama. | 8. Idaho. | 15. New Hampshire. |
| 2. Arizona. | 9. Indiana. | 16. North Dakota. |
| 3. Arkansas. | 10. Iowa. | 17. Oklahoma. |
| 4. Colorado. | 11. Kentucky. | 18. Tennessee. |
| 5. Delaware. | 12. Louisiana. | 19. West Virginia. |
| 6. Florida. | 13. Missouri. | |
| 7. Georgia. | 14. Nebraska. | |

For the following named States comparable data for the three years were not available, as these States were not in the registration area for deaths:

1. Nevada.
2. New Mexico.
3. South Dakota.
4. Texas.

It is gratifying to note from these lists that all of the States that were rated as standard last year received that rating this year, and that two additional States have been added to that group, viz, Maine and Montana. It is felt that each year there will be additions of States to the list of those which attain the standard rating. The development of improved reporting of the notifiable diseases is a slow process, but the importance of the ultimate end to be attained justifies our continued and earnest efforts.

BACTERIUM GRANULOSIS CONJUNCTIVITIS COMPARED WITH THAT PRODUCED FROM HUMAN TRACHOMA

TRANSMISSIBILITY OF THE GRANULAR CONDITION INDUCED IN *MACACUS RHEBUS* MONKEYS BY INOCULATION WITH CULTURES OF *BACTERIUM GRANULOSIS* CONTRASTED WITH THAT INDUCED IN THE SAME SPECIES BY DIRECT TRANSFER FROM HUMAN TRACHOMA

By IDA A. BENGTON, Senior Bacteriologist, National Institute of Health

In an effort to determine the relationship of the form of granular conjunctivitis induced in *Macacus rhesus* monkeys by the inoculation of *Bacterium granulosis* into the conjunctiva of this species with that induced by direct transmission from cases of human trachoma in Missouri in the same species, experiments were undertaken with the following series of monkeys:

Series I: Monkeys in which the granular condition originally induced by the inoculation of cultures of *Bact. granulosis* was thereafter transmitted by transfer of secretion by means of sterile cotton swabs.

Series II: Monkeys in which a granular condition originally induced by repeated swabbings from cases of trachoma in Missouri was

thereafter transmitted by transfer of secretion by means of sterile cotton swabs.

Series III: Four monkeys in which an attempt was made to produce immunity by subcutaneous and intravenous inoculations of killed cultures of *Bact. granulosus*, after which passage of the granular condition from monkeys of Series I was attempted. Four control monkeys, unvaccinated, are included in this series.

Series IV: Four monkeys in which an attempt was made to produce immunity by subcutaneous and intravenous inoculations of killed cultures of *Bact. granulosus*, after which passage of the granular condition from monkeys of Series II was attempted. Four control monkeys are included in this series also.

Series I was started from a single monkey, as recounted in a previous publication (1). A number of attempts with negative results had been made to obtain the granular condition described by Noguchi (2) by means of inoculation with cultures. The strains used had been under cultivation for some time and had been received from the Rockefeller Institute for Medical Research and from Doctors Finnoff and Thygeson. The successful implantation of the culture was accomplished by Dr. Phillips Thygeson, who used a number of strains isolated more recently than those used by the writer.

The condition was continued by passage through six other monkeys, using the method of swabbing a single time. The lesions consisted of rather numerous follicles on the upper and lower lids of both the inoculated and uninoculated eyes, with congestion and hypertrophy of the conjunctiva. In some cases follicles were present on the conjunctiva over the tarsus, though these were smaller and more discrete than those in the fornix. The incubation period was short, congestion of the conjunctiva usually becoming apparent in 7 or 8 days, with follicles appearing a few days later. The condition was definitely active and progressive. The symbol + + + + was used to indicate the degree of activity.

Series II included two monkeys which had been repeatedly swabbed from trachoma cases in the Trachoma Hospital at Rolla, Missouri. A number of earlier attempts (1) had failed to produce lesions sufficiently pronounced to make it seem worth while attempting to continue the condition by passage. The first of the monkeys referred to was swabbed repeatedly during the period January 20-27, 1932. The conjunctiva of the treated eye showed some congestion and a few rather definite follicles in 14 days. The condition progressed slowly until April 22, when definite, rather large follicles were present in the upper and lower lids of the uninoculated eye in sufficient number to make it seem worth while to attempt passage to another monkey (No. 486). This monkey was treated six times with secretion from the first monkey (No. 519). A few follicles developed early, but the

condition progressed slowly, and it was not until about June 1 that the condition appeared very active, at which time there were numerous large succulent follicles on both the upper and lower lids of both eyes. The degree of activity of the condition was recorded as + + + ±.

Another monkey (No. 548) was swabbed repeatedly with secretions from a patient at Rolla, Mo., during the period April 4-11. Definite follicles were present on the conjunctiva of the upper lid of the treated eye in about a month. By June 22 the condition had progressed to the extent that the lesions were recorded as + + +. The uninoculated eye remained unaffected.

The monkeys in Series III and IV were inoculated with killed cultures of 6 strains of *Bact. granulosis*, 4 by the subcutaneous route and 4 by the intravenous route. The results were negative in all cases when the sera of the monkeys were tested for agglutinins against suspensions of the organism before the inoculations were begun. Eight weekly inoculations were given, beginning with 0.5 c c of a suspension containing approximately one billion organisms per c c and ending with 2 c c of a heavy suspension approximately five times as turbid. The monkeys apparently suffered no ill effects from the inoculations and there was only an occasional slight elevation of temperature.

Thygeson (3) reports that subconjunctival inoculations of a killed culture of *Bact. granulosis* failed to prevent the development of a granular condition in monkeys when tissue from infected monkeys was inoculated subconjunctivally. In the present work it was thought possible that by the introduction of the vaccine by the intravenous or subcutaneous routes more protection might be afforded. At the same time, by a comparison of the results in the monkeys in which the infection was originally induced by inoculation of cultures of *Bact. granulosis* and those in which the condition was first induced by direct transfer, it might be possible to obtain some information as to the relationship of the two conditions.

Antibody response as the result of the inoculation of the killed cultures is indicated by the results of the agglutination test, which was as follows:

	Monkey- No.	Serum dilutions								Control
		1:12.5	1:25	1:50	1:100	1:200	1:400	1:800	1:1600	
Intravenous inoculation.....	518	3	4	3	2	1	0	0	0	0
	524	4	4	4	4	2	1	0	0	0
	489	4	4	4	3	1	0	0	0	0
	529	4	4	4	3	2	1	0	0	0
Subcutaneous inoculation.....	527	4	4	4	4	3	1	0	0	0
	528	4	4	4	4	3	1	0	0	0
	546	4	4	2	2	1	0	0	0	0
	264	4	4	4	4	3	3	1	0	0
Rabbit immune serum.....		4	4	4	4	3	3	1	0	0

NOTE.—4 signifies complete agglutination, 3 somewhat less precipitation than 4, 2 about half of the organisms precipitated, 1 slight agglutination.

On June 22 passage of the granular condition induced originally by inoculation with cultures of *Bact. granulosus* was attempted in the monkeys of Series III, using four of the vaccinated monkeys (two vaccinated by the intravenous route and two by the subcutaneous route) and four control monkeys. Passage was made from three of the monkeys in Series I, the method used being that of rubbing a sterile swab over the conjunctival surface of the infected monkey and then over the conjunctival surface of the monkey under test. In this series only one swabbing was practiced.

Passage of the granular condition induced by direct transfer from trachoma cases was made from the two monkeys in Series II (519 and 548) and from 486 which had developed lesions which seemed sufficiently pronounced that positive results might be expected in attempted transmission. In this series, swabbing was practiced as above, except that three swabbings instead of one were used.

On August 25 the results of the tests were recorded as follows:

SERIES III.—Inoculated from "culture" monkeys

	Right eye	Left eye
Vaccinated monkeys:		
518	++++	++++
524	(Died)	
525	+++	+++
527	++++	++++
Control monkeys (unvaccinated):		
583	++++	++++
590	—	—
587	+++	+++
587	—	—

SERIES IV.—Inoculated from "direct transfer" monkeys (519, 548, 486)

	Right eye	Left eye
Vaccinated monkeys:		
489	++++	+++
529	(Died)	
504	—	—
546	—	—
Control monkeys (unvaccinated):		
439	—	—
549	—	—
598	—	—
619	—	—

In Series III, 5 of the monkeys developed lesions in both eyes, 1 died, and 2 were negative. The 2 monkeys in which negative results were obtained were again swabbed (August 25). No. 587 developed lesions recorded as +++±, No. 590 remained negative.

In the direct passage series (IV) 1 monkey developed definite lesions, 1 died, and 6 were negative. Passage to four of those negative has been again attempted, but the results are still negative or only slightly suggestive.

COMMENT

Inasmuch as protection was not afforded against the granular condition in all of the animals in either series, namely, those in which the infection was induced by direct transfer and those in which infection was induced by inoculation with cultures, definite conclusions may not be drawn in regard to the immunological relationship of the two conditions. The results obtained in the monkeys which did not become infected may be explained on the basis of insusceptibility rather than on the basis of immunity. In both series more animals were infected in the vaccinated than in the unvaccinated group. It is very apparent, therefore, that vaccination by the subcutaneous route or by the intravenous route does not protect against either conjunctival infection, even after as many as eight successive inoculations.

Regarding transmissibility, it appears that the condition induced by direct transfer, as indicated by the results obtained thus far, is less readily transmissible than that induced by inoculation with cultures of *Bact. granulosis*, although more frequent swabbings were made (three swabbings in Series II as compared with one in Series I). Whether this difference is of significance and whether it would be constantly true can not be said without further tests. As to the appearance of the lesions, there were no striking differences, except that the lesions induced by direct transfer of human trachomatous material and by passage thereafter have appeared somewhat less active than those induced by culture inoculation.

The results obtained emphasize the fact that the appearance of the lesions in monkeys can not be used as an accurate criterion to determine whether the condition is one which is the counterpart of that occurring in human trachoma. It might be expected that the direct transfer monkeys would have developed lesions more nearly approaching those of human trachoma, but this was not the case. There was no evidence of pannus or corneal involvement, and the condition appeared not only somewhat less active but at the time of this report it appears that it will be less chronic. The explanation of the different appearance of the lesions in man and animals very probably lies in the greater resistance to the disease on the part of the monkey as compared with that of human beings. Other instances are known in which a disease manifests itself differently in man than it does in animals.

In conclusion it may be said that it is believed that further work along the line suggested may furnish information regarding the problem of the etiological relationship of *Bact. granulosis* to trachoma, for the solution of which some workers have considered human experimentation necessary.

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- (1) Bengtson, Ida A. (1932): Pub. Health Rep., 47, 1914-35.
- (2) Noguchi, H. (1928): Journ. Exper. Med., 48, Supp. No. 2.
- (3) Thygeson, P. (1932): Am. Jour. Ophth., 15, 293-306.

COURT DECISION RELATING TO PUBLIC HEALTH

City held not liable for driving cattle from watershed.—(Colorado Supreme Court; Phillips v. City of Golden, 14 P. (2d) 1013; decided Sept. 19, 1932.) The city of Golden owned several thousand acres of land as a watershed. Some dairy cattle which came upon the city's land were driven off, and the owner of the cattle brought an action for alleged damage to them. The judgment of the lower court in favor of the city was affirmed by the supreme court, which, in its opinion, stated in part as follows:

* * * It was not only the right but also the duty of the city to maintain the purity of its water supply for the domestic use of its inhabitants. This proposition is too self-evident to require the citation of authority. We held in Richards v. Sanderson, supra, that parties have the right to drive trespassing cattle from their own unfenced lands, exercising that degree of care to prevent injury that would be ordinarily observed by a prudent person, and there is no evidence in the case now before us that the city did otherwise.

DEATHS DURING WEEK ENDED NOVEMBER 19, 1932

[From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce]

	Week ended Nov. 19, 1932	Correspond- ing week, 1931
Data from 85 large cities of the United States:		
Total deaths.....	7,477	7,676
Deaths per 1,000 population, annual basis.....	11.0	11.1
Deaths under 1 year of age.....	619	643
Deaths under 1 year of age per 1,000 estimated live births.....	51	50
Deaths per 1,000 population, annual basis, first 46 weeks of year.....	11.0	11.8
Data from industrial insurance companies:		
Policies in force.....	69,914,948	74,167,145
Number of death claims.....	13,548	13,440
Death claims per 1,000 policies in force, annual rate.....	19.1	18.4
Death claims per 1,000 policies, first 46 weeks of year, annual rate.....	18.5	18.7

* 1932, 81 cities; 1931, 77 cities.

PREVALENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

CURRENT WEEKLY STATE REPORTS

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers

Reports for Weeks Ended November 26, 1932, and November 28, 1931

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended November 26, 1932, and November 28, 1931

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931
New England States:								
Maine.....	4	2	1	1	2	213	0	0
New Hampshire.....		9			1	10	0	0
Vermont.....	4	1			1	64	0	0
Massachusetts.....	43	47	2	1	68	114	2	1
Rhode Island.....	6	12				155	0	0
Connecticut.....	8	2	10	1	6	44	1	0
Middle Atlantic States:								
New York.....	65	119	19	115	345	278	4	8
New Jersey.....	21	27	14	12	89	29	0	2
Pennsylvania.....	108	98			246	365	4	5
East North Central States:								
Ohio.....	90	111	6	22	143	74	1	1
Indiana.....	85	90	48	9	7	19	2	0
Illinois.....	89	140	52	10	58	29	12	5
Michigan.....	20	53	3		230	52	3	1
Wisconsin.....	3	22	26	20	148	16	2	0
West North Central States:								
Minnesota.....	10	27			74	8	1	2
Iowa.....	14	21				2	0	2
Missouri.....	46	72	2	16		22	2	1
North Dakota.....	5	5			115		0	1
South Dakota.....	11	4	1			38	0	0
Nebraska.....	22	29		5		14	0	0
Kansas.....	25	71	8		2	12	2	0
South Atlantic States:								
Delaware.....	3	33			2		0	1
Maryland ¹	12	82	15	8	3	6	1	1
District of Columbia ¹	4	19	3			5	0	0
Virginia.....	69				61		1	
West Virginia.....	62	69	55	9	97	286	1	1
North Carolina ²	53	116	15	89	51	15	1	2
South Carolina.....	17	27	469	401	4	3	0	0
Georgia ¹	49	35		36		10	0	2
Florida ¹	39	10	2	1		1	0	0

See footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended November 26, 1932, and November 28, 1931—Continued

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931
East South Central States:								
Kentucky.....	107	81	89				1	1
Tennessee.....	84	78	169	29	4	17	4	6
Alabama.....	42	84	1,940	21	3	6	2	0
Mississippi.....	24	87					0	0
West South Central States:								
Arkansas.....	30	23	111	10	1	1	0	0
Louisiana.....	32	49	600	10	1	5	1	0
Oklahoma.....	83	111	47	34	6	1	0	0
Texas.....	171	92	73	5	1	11	0	0
Mountain States:								
Montana.....		5	27	2	138	329	0	0
Idaho.....	6		28		4		0	0
Wyoming.....					1	2	1	0
Colorado.....	5	4			6	1	0	1
New Mexico.....	15	14	22			9	9	1
Arizona.....	7	12	479	2	1		0	2
Utah.....	3	1	146	11	1		1	2
Pacific States:								
Washington.....	8	5	1			31	0	2
Oregon.....	3		112	24	40	1	0	0
California.....	71	91	1,721	42	41	116	3	5
Total.....	1,648	2,000	6,306	846	2,001	2,414	62	59

Division and State	Pollomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931
New England States:								
Maine.....	0	0	13	33	0	0	4	5
New Hampshire.....	0	0	12	6	0	0	1	0
Vermont.....	0	1	7	4	0	9	0	0
Massachusetts.....	0	12	242	221	0	0	2	1
Rhode Island.....	0	0	25	21	0	0	0	0
Connecticut.....	0	3	64	44	0	0	1	2
Middle Atlantic States:								
New York.....	4	16	463	419	0	36	13	15
New Jersey.....	1	9	186	106	0	0	5	5
Pennsylvania.....	6	10	542	423	0	0	23	43
East North Central States:								
Ohio.....	2	1	641	460	2	22	12	14
Indiana.....	1	0	93	107	2	10	4	3
Illinois.....	3	8	354	235	1	17	11	20
Michigan.....	1	8	281	178	0	24	3	5
Wisconsin.....	0	6	68	56	1	1	14	7
West North Central States:								
Minnesota.....	0	4	77	44	0	2	2	1
Iowa.....	0	11	41	40	12	137	0	2
Missouri.....	0	1	72	66	0	1	4	9
North Dakota.....	0	2	22	10	14	6	0	0
South Dakota.....	0	0	8	11	1	9	2	2
Nebraska.....	1	0	31	30	2	22	0	1
Kansas.....	0	0	85	67	1	11	4	1
South Atlantic States:								
Delaware.....	0	0	3	9	0	0	0	0
Maryland.....	2	2	71	95	0	0	4	17
District of Columbia.....	0	0	16	18	0	0	1	2
Virginia.....	3		84		0	5	21	
West Virginia.....	0	1	82	73	0	0	15	38
North Carolina.....	1	2	94	123	0	1	14	14
South Carolina.....	1	1	14	14	1	0	5	16
Georgia.....	1	0	22	29	0	1	10	19
Florida.....	0	1	4	6	0	0	0	1

See footnotes at end of table.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended November 26, 1932, and November 23, 1931—Continued

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931	Week ended Nov. 26, 1932	Week ended Nov. 28, 1931
East South Central States:								
Kentucky.....	4	1	128	88	0	7	34	34
Tennessee.....	3	1	59	72	7	2	20	23
Alabama ¹	1	1	46	71	0	0	8	22
Mississippi.....	0	0	30	39	1	2	1	0
West South Central States:								
Arkansas.....	0	1	50	23	0	4	5	6
Louisiana.....	0	1	16	22	1	8	1	11
Oklahoma ²	1	0	53	51	8	1	8	33
Texas ³	0	0	117	39	1	9	8	9
Mountain States:								
Montana.....	0	1	13	18	0	1	2	0
Idaho.....	0	0	0	7	2	0	1	0
Wyoming.....	0	0	9	14	0	0	1	0
Colorado.....	0	0	27	17	1	0	7	8
New Mexico.....	0	0	4	15	0	0	1	9
Arizona.....	0	1	5	4	0	0	0	0
Utah ⁴	0	1	12	6	0	0	0	0
Pacific States:								
Washington.....	5	2	24	48	6	20	8	1
Oregon.....	1	0	31	19	0	6	2	2
California.....	1	2	159	122	2	14	9	10
Total.....	43	108	4,440	3,612	66	388	291	411

¹ New York City only.

² Week ended Friday.

³ Typhus fever, week ended Nov. 26, 1932, 22 cases: 1 case in District of Columbia, 1 case in North Carolina, 6 cases in Georgia, 2 cases in Florida, 3 cases in Alabama, and 9 cases in Texas.

⁴ Figures for 1932 are exclusive of Oklahoma City and Tulsa.

SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of cases reported monthly by States is published weekly and covers only those States from which reports are received during the current week.

State	Meningococcus meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
October, 1932										
California.....	8	240	1,075	9	115	2	16	400	14	46
Idaho.....		25	11		2		3	25	24	10
Indiana.....	27	404	122		41		7	471	3	96
Kansas.....	5	155	10	1	24		6	376	3	17
Missouri.....	10	450	13	10	41	1		546	0	109
New Mexico.....		79	71	6	3	2	1	59	0	54
Oklahoma ¹	4	485	127	159	7	10	3	177	4	127
Oregon.....	1	9	283	27	88	1	7	80	5	18
South Dakota.....	1	17	2		5		1	60	2	10
Texas.....		847	221	856		6	18	309		117
Virginia.....	2	342		35	169	16	13	382	0	111
Washington.....		18	106		28		21	109	14	27

¹ Exclusive of Oklahoma City and Tulsa.

October, 1932		Lethargic encephalitis:		Septic sore throat—Con.	
	Cases		Cases		Cases
Actinomycosis:		California	3	Missouri	16
California	1	Indiana	1	Oklahoma ¹	32
Kansas	1	Oregon	1	Oregon	3
Anthrax:				Virginia	16
California	2	Mumps:		Tetanus:	
Missouri	1	California	350	California	6
South Dakota	1	Idaho	94	Kansas	1
Chicken pox:		Indiana	47	Virginia	1
California	556	Kansas	95	Washington	1
Idaho	87	Missouri	53	Trachoma:	
Indiana	306	New Mexico	4	California	7
Kansas	262	Oklahoma ¹	10	Indiana	5
Missouri	116	Oregon	20	Oklahoma ¹	7
New Mexico	30	South Dakota	3	South Dakota	25
Oklahoma ¹	18	Washington	31	Virginia	2
Oregon	82	Ophthalmia neonatorum:		Trichinosis:	
South Dakota	104	California	4	California	1
Virginia	90	Indiana	1	South Dakota	1
Washington	303	New Mexico	2	Tularaemia:	
Conjunctivitis:		Oregon	1	Missouri	2
New Mexico	3	Virginia	1	Virginia	1
Diarrhea and dysentery:		Paratyphoid fever:		Typhus fever:	
Virginia	207	California	2	Virginia	3
Dysentery:		Kansas	1	Undulant fever:	
California (amebic)	8	New Mexico	1	California	7
California (bacillary)	37	Texas	11	Indiana	6
Oklahoma ¹	12	Washington	15	Kansas	8
Oregon	2	Washington	1	Missouri	18
Food poisoning:		Psittacosis:		Oregon	1
California	62	California	3	Virginia	3
New Mexico	1	Puerperal septicemia:		Washington	1
German measles:		New Mexico	1	Vincent's angina:	
California	30	Rabies in animals:		Kansas	3
Indiana	2	California	20	Oklahoma ¹	3
Kansas	1	Missouri	4	Oregon	17
New Mexico	1	Washington	7	Whooping cough:	
Washington	13	Rabies in man:		California	668
Granuloma, coccidioid:		California	1	Indiana	64
California	3	Relapsing fever:		Kansas	138
Impetigo contagiosa:		California	1	Missouri	88
Kansas	12	Scabies:		New Mexico	23
Oregon	122	Oklahoma ¹	4	Oklahoma ¹	8
Washington	3	Oregon	91	Oregon	30
Leprosy:		Septic sore throat:		South Dakota	19
California	1	California	8	Virginia	234
		Idaho	1	Washington	41
		Kansas	3		

¹ Exclusive of Oklahoma City and Tulsa.

WEEKLY REPORTS FROM CITIES

City reports for week ended November 19, 1932

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Small-pox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
Maine:											
Portland	0		0	0	3	3	0	0	0	3	17
New Hampshire:											
Concord	0		0	0	1	0	0	0	0	0	6
Nashua	0		0	0	0	1	0	0	0	0	
Vermont:											
Barre	0		0	0	0	0	0	1	0	0	8
Massachusetts:											
Boston	8		0	38	28	52	0	3	0	50	183
Fall River	0		0	0	0	4	0	2	0	1	29
Springfield	0	1	0	0	0	5	0	5	0	1	32
Worcester	8		0	0	2	15	0	1	1	9	43
Rhode Island:											
Pawtucket	0		0	0	0	0	0	0	0	0	19
Providence	2		0	0	2	13	0	3	0	7	65
Connecticut:											
Bridgeport	0	4	0	9	2	6	0	3	0	6	41
Hartford	2	1	0	0	2	4	0	4	0	1	29
New Haven	1	1	0	0	3	2	0	1	1	8	55
New York:											
Buffalo	1		0	2	15	29	0	6	0	17	120
New York	47	18	7	153	105	111	2	60	8	71	1,326
Rochester	22		0	1	5	19	0	1	0	5	71
Syracuse	0		0	1	9	12	0	0	0	3	63

City reports for week ended November 19, 1932—Continued

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Small-pox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
New Jersey:											
Camden	6		0	1	2	2	0	4	0	1	44
Newark	0	13	0	40	3	7	0	6	1	9	92
Trenton	0		0	0	8	9	0	6	0	0	45
Pennsylvania:											
Philadelphia	5	4	0	5	29	80	0	33	2	9	478
Pittsburgh	11		1	2	10	43	0	5	1	12	142
Reading	8		0	11	1	2	0	1	0	3	29
Ohio:											
Cincinnati	3		0	0	10	16	0	9	0	3	113
Cleveland	10	113	4	1	10	80	0	10	2	15	181
Columbus	6	2	2	51	2	12	0	4	0	7	86
Toledo	4		0	7	3	37	0	2	0	2	57
Indiana:											
Fort Wayne	0		0	0	2	3	0	0	0	0	14
Indianapolis	2		0	1	14	6	0	3	1	0	
South Bend	0		0	0	3	9	0	1	0	6	16
Terre Haute	0		0	1	2	7	1	1	0	0	23
Illinois:											
Chicago	23	6	3	40	36	166	0	33	3	22	618
Springfield	4	1	0	0	0	14	0	1	0	0	18
Michigan:											
Detroit	17	2	2	42	18	93	0	17	1	56	237
Flint	2	21	0	2	2	5	0	0	0	7	18
Grand Rapids	0		0	0	2	5	0	0	0	5	29
Wisconsin:											
Kenosha	0		0	1	0	3	0	0	0	3	9
Madison	0			1		0	0		0	1	
Milwaukee	4	2		8	8	16	0	3	1	34	105
Racine	2		0	0	1	2	0	0	0	6	9
Superior	0		0	0	3	0	0	0	0	0	12
Minnesota:											
Duluth	1		0	2	4	0	0	0	0	0	14
Minneapolis	4		1	15	6	11	0	5	1	9	95
St. Paul	0		0	0	5	23	0	2	0	13	57
Iowa:											
Des Moines	6			0		7	0		0	0	24
Sioux City	1			0		1	0		0	0	
Waterloo	0			0		0	0		0	1	
Missouri:											
Kansas City	1		0	10	7	15	0	4	0	0	86
St. Joseph	10		0	0	4	1	0	0	0	0	30
St. Louis	24		0	1	9	17	0	9	5	1	199
North Dakota:											
Fargo	0		0	0	0	1	0	0	0	0	7
Grand Forks	0		0	19	0	0	0	0	0	0	
Nebraska:											
Lincoln	1			0		1	0		0	0	
Omaha	16		0	2	4	20	0	2	0	0	40
Kansas:											
Topeka	2		0	5	3	3	0	0	0	0	13
Wichita	1		0	0	3	5	0	0	0	0	30
Delaware:											
Wilmington	0		0	0	0	0	0	1	0	3	26
Maryland:											
Baltimore	3	7	3	3	21	39	0	10	3	18	207
Cumberland	0	0	0	0	1	1	0	2	0	0	10
Frederick											
District of Col.:											
Washington	3	3	1	1	10	7	0	16	6	12	131
Virginia:											
Lynchburg	3		0	0	1	1	0	0	0	1	13
Richmond	5		1	0	4	4	0	3	3	0	48
Roanoke	3		0	0	1	8	0	0	1	0	8
West Virginia:											
Charleston	2		0	0	1	3	0	1	0	3	12
Huntington	0		0	13	0	15	0	0	0	0	
Wheeling	0		0	68	1	1	0	0	0	5	19
North Carolina:											
Raleigh	1		0	0	0	5	0	0	0	0	17
Wilmington	1		0	0	1	1	0	0	0	0	10
Winston-Salem	3		0	1	1	7	0	0	0	4	9
South Carolina:											
Charleston	1	6	1	0	0	0	0	1	1	0	21
Columbia	1		0	0	2	2	0	0	0	0	14
Greenville	0			0		1	0		0		

City reports for week ended November 19, 1932—Continued

State and city	Diph- theria cases	Influenza		Meas- les cases	Pneu- monia deaths	Scarlet fever cases	Small- pox cases	Tuber- culosis deaths	Ty- phoid fever cases	Whoop- ing cough cases	Deaths, all causes
		Cases	Deaths								
Georgia:											
Atlanta.....	16	1	0	0	12	14	0	5	0	9	77
Brunswick.....	1		0	0	0	0	0	0	0	0	2
Savannah.....	3	3	1	0	2	2	0	1	1	0	31
Florida:											
Miami.....	0	1	0	0	0	0	0	0	0	0	22
Tampa.....	4		0	0	0	1	0	3	0	1	23
Kentucky:											
Covington.....											
Lexington.....	1		0	0	2	3	0	3	0	0	12
Louisville.....	10	2	0	0	4	14	0	6	0	3	78
Tennessee:											
Memphis.....	14		0	1	3	5	0	5	4	0	76
Nashville.....	0		2	0	4	1	0	5	0	0	55
Alabama:											
Birmingham.....	8	4	0	1	3	10	0	2	2	2	65
Mobile.....	4		1	0	1	3	0	0	0	0	22
Montgomery.....	0	1		1		1	0		0	0	
Arkansas:											
Fort Smith.....	0		0	0	0	2	0	0	0	0	
Little Rock.....	2		0	0	0	3	0	1	0	1	2
Louisiana:											
New Orleans.....	12	8	5	0	6	12	0	12	2	0	159
Shreveport.....	1		0	0	0	1	0	0	0	0	31
Oklahoma:											
Muskogee.....	0		0	0	0	1	0	0	0	0	
Tulsa.....	1			0		4	0		0	1	
Texas:											
Dallas.....	18		0	0	4	9	0	1	0	0	63
Fort Worth.....	8		0	1	1	20	0	1	0	0	34
Galveston.....	0		0	0	0	1	0	0	0	0	7
Houston.....	17		0	0	8	4	0	5	0	0	85
San Antonio.....	4		2	0	7	0	0	11	0	0	37
Montana:											
Billings.....	0		0	0	0	0	0	0	0	0	8
Great Falls.....											
Helena.....	0		0	0	0	0	0	0	0	0	5
Missoula.....	0		0	0	0	0	0	0	0	0	2
Idaho:											
Boise.....	0		0	1	0	0	0	0	0	0	1
Colorado:											
Denver.....	4		1	2	6	12	0	2	0	4	80
Pueblo.....	0		0	0	0	1	0	0	3	0	6
New Mexico:											
Albuquerque.....	1	2	3	1	1	1	0	3	0	0	19
Arizona:											
Phoenix.....	0		4	0	3	0	0	2	0	0	
Utah:											
Salt Lake City.....	0		0	0	3	2	0	0	0	0	35
Nevada:											
Reno.....	0		0	0	0	1	0	0	0	0	3
Washington:											
Seattle.....	1			0		12	0		1	2	
Spokane.....	0			2		1	0		0	0	
Tacoma.....	0		1	1	1	3	0	0	0	3	26
Oregon:											
Portland.....	2	2	0	1	6	10	0	0	0	0	74
Salem.....	0		0	2		0	0		0	0	
California:											
Los Angeles.....	28	323	7	16	15	52	0	29	0	19	301
Sacramento.....	0	10	0	2	5	3	0	3	0	10	26
San Francisco.....	4	67	0	2	4	7	0	8	0	36	146

City reports for week ended November 19, 1932—Continued

State and city	Meningococcus meningitis		Polio-myelitis cases	State and city	Meningococcus meningitis		Polio-myelitis cases
	Cases	Deaths			Cases	Deaths	
Connecticut: Bridgeport.....	1	0	0	Kansas: Topeka.....	0	1	0
New York: Buffalo.....	1	0	0	District of Columbia: Washington.....	1	0	0
New York: Rochester.....	1	0	0	Virginia: Richmond.....	0	0	1
Pennsylvania: Philadelphia.....	0	1	8	Tennessee: Memphis.....	0	0	1
Pittsburgh.....	0	0	1	Louisiana: New Orleans.....	0	0	2
Ohio: Cleveland.....	1	1	0	Washington: Seattle.....	0	0	1
Columbus.....	0	0	1	California: Los Angeles.....	0	1	0
Toledo.....	0	1	0	San Francisco.....	0	0	1
Indiana: Indianapolis.....	1	0	1				
Illinois: Chicago.....	12	2	0				
Michigan: Detroit.....	1	0	1				
Flint.....	1	0	0				

Lethargic encephalitis.—Cases: Pittsburgh, 1; Detroit, 2; Atlanta, 1.

Pellagra.—Cases: Wilmington, 1; Atlanta, 1; Birmingham, 3.

Typhus fever.—Cases: Baltimore, 1; Savannah, 3.

FOREIGN AND INSULAR

CANADA

Provinces—Communicable diseases—Week ended November 12, 1932.—The Department of Pensions and National Health of Canada reports cases of certain communicable diseases for the week ended November 12, 1932, as follows:

Disease	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Cerebrospinal meningitis.....				1	1				1	3
Chicken pox.....		23	1	71	272	53	15	4	65	504
Diphtheria.....	1	5	2	38	13	5	1	3	3	71
Erysipelas.....					1	3			1	5
Influenza.....		27			16	3			242	288
Lethargic encephalitis.....					1					1
Measles.....		3	3	118	323	9		37	15	508
Mumps.....					81	5				86
Paratyphoid fever.....					2					2
Pneumonia.....		1			4				12	17
Poliomyelitis.....			2	5	5			1		13
Scarlet fever.....	1	4	5	70	86	16	11	7	28	234
Smallpox.....					1					1
Trachoma.....						1			3	4
Tuberculosis.....	1	2	2	73	20	8		2	8	116
Typhoid fever.....	3	1	4	45	11	11		4	1	80
Undulant fever.....					4					4
Whooping cough.....				134	78	37	4	2	29	284

GREAT BRITAIN

Scotland—Vital statistics—Quarter ended September 30, 1932.—The Registrar General of Scotland has published the following statistics for the third quarter of the year 1932:

Population (provisional).....	4,880,000	Deaths from—Continued.....	
Births.....	22,030	Heart disease.....	2,098
Birth rate per 1,000 population.....	18.0	Influenza.....	54
Deaths.....	13,191	Lethargic encephalitis.....	15
Death rate per 1,000 population.....	10.8	Measles.....	35
Marriages.....	9,343	Nephritis, acute.....	49
Deaths under 1 year.....	1,397	Nephritis, chronic.....	228
Deaths under 1 year per 1,000 births.....	63	Paratyphoid fevers.....	6
Deaths from—		Pneumonia.....	291
Bronchitis.....	396	Poliomyelitis.....	2
Bronchitis-pneumonia.....	313	Puerperal sepsis.....	35
Cancer.....	1,897	Scarlet fever.....	41
Cerebrospinal fever.....	41	Syphilis.....	29
Diabetes.....	143	Tetanus.....	5
Diphtheria.....	69	Tuberculosis.....	832
Dysentery.....	4	Typhoid fever.....	7
Erysipelas.....	25	Whooping cough.....	73

YUGOSLAVIA

Communicable diseases—October, 1932.—During the month of October, 1932, certain communicable diseases were reported in Yugoslavia as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Anthrax.....	150	15	Paratyphoid fever.....	94	5
Cerebrospinal meningitis.....	4	1	Polio-myelitis.....	63	9
Diphtheria and croup.....	1,675	144	Scarlet fever.....	679	24
Dysentery.....	805	84	Sepsis.....	12	3
Erysipelas.....	174	6	Tetanus.....	38	17
Measles.....	388	6	Typhoid fever.....	1,805	139

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

(NOTE.—A table giving current information of the world prevalence of the quarantinable diseases appeared in the Public Health Reports for November 25, 1932, pp. 2231-2244. A similar cumulative table will appear in the Public Health Reports to be issued December 30, 1932, and thereafter, at least for the time being, in the issue published on the last Friday of each month.)

Cholera

Philippine Islands.—During the week ended November 26, 1932, 35 cases of cholera with 26 deaths were reported in the Province of Samar, Philippine Islands.

Plague

Argentina.—On November 10, 1932, 4 deaths from plague were reported in the Province of Rioja, Argentina.

Hawaii Territory.—On November 14, 1932, a plague-infected rat was found in Paauilo, in the interior of Hamakua District, island of Hawaii. The location is about 175 miles from Honolulu which is on the island of Oahu.

On vessel.—Three members of the crew of the Greek S. S. *Patris*, suffering from plague, were removed November 8, 1932, at Beirut, Syria.

Yellow Fever

Brazil.—Deaths from yellow fever have been reported in Brazil as follows: State of Ceara, 1 death July 26, 1932; 1 death September 14. State of Pernambuco, 1 death August 5, and 1 death September 4.